REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 7, 13, 18, 19, and 21 are amended, claims 27-28 are canceled, and claims 29-36 are added herein. With entry of this amendment, claims 1-26 and 29-36 will be pending.

II. Drawings:

The specification has been amended to include reference number 54. The drawings are believed to comply with 37 C.F.R. 1.84(p)(5).

III. Claims Rejections Under 35 U.S.C. 112:

Claim 7 has been amended to specify that the "network device" in line 13 is the "second network device." As amended, claim 7 is believed to comply with 35 U.S.C. 112.

IV. Claim Rejections Under 35 U.S.C. 102:

Claims 1-28 stand rejected under 35 U.S.C. 102 as being anticipated by U.S. Patent No. 6,502,131 (Vaid et al.).

Vaid et al. disclose a directory enabled policy management tool for intelligent traffic management. The tool is used for monitoring or profiling quality of service within one or more information sources in a network of computers. The system includes applications or tools that are distributed over the network to monitor one or more nodes on the network. The tools can be disposed, for example, at a router, server,

firewall, client, or other information source. A bandwidth management tool is used to control incoming and outgoing traffic over the network. A flow analysis module implements traffic control based on a combination of flow control and queuing algorithms. QoS agents are distributed throughout the network to monitor and control bandwidth.

Claim 1 is directed to a method for propagating filters to an upstream device and generally includes: generating a filter at a first network device; sending information on the filter to a second network device located upstream from the first network device; and requesting the second network device to install a filter so that data is filtered closer to a source of the data. Claim 1 has been amended to include sending routing information from the first network device to the second device so that the filter installed on the second network device filters traffic forwarded to the first network device without filtering traffic to other downstream nodes, and analyzing new data received at the first network device and sending filter information to the second network device based on the analyzed data so that the second network device can refine the filter installed thereon.

Vaid et al. simply show agents distributed throughout a network. Vaid et al. do not disclose sending routing information from a first network device to a second network device so that a filter installed on the second network device filters traffic forwarded to the first network device without filtering traffic to other downstream nodes. Applicant's invention is particularly advantageous in that it shares filter information between a downstream node and an upstream node such that only traffic that would be forwarded to the requesting downstream node is affected. Importantly, this limits use of the system by an attacker as a means for carrying out a denial of service attack, for example. Furthermore, applicant's invention, as set forth in claim 1, analyzes new data received at the first network device and sends filter information to the second network device so that it can refine its filter, as needed. The distributed agents of Vaid et al. provide monitoring and control of incoming and outgoing traffic

over a network. The agents are placed at a plurality of nodes (see Fig. 16) and coupled directly to a distributed policy management tool. There is no direct communication between a downstream and upstream node with information being exchanged between the two nodes to refine filters based on analysis of data at the associated node.

Accordingly, claim 1 is submitted as not anticipated by Vaid et al. Claims 2-12 and 35-36, depending either directly or indirectly from claim 1, are submitted as patentable for the same reasons as claim 1.

Claims 13 and 18 have been amended to include code or means for sending routing information from a first network device to a second network device so that the filter installed on the second network device filters traffic forwarded to the first network device without filtering traffic to other downstream nodes, and are submitted as patentable for the reasons discussed above with respect to claim 1.

Claims 14-17, depending directly from claim 13, are submitted as patentable for the same reasons as claim 13.

Claim 19 is directed to a method for installing filters on connected network devices and generally includes analyzing network flow received at a first network device, generating a filter at a second network device based on the analyzed flow, and propagating the filter from the second network device to the first network device. Claim 19 has been amended to include generating filter statistics at the second network device, sending filter statistics to the first network device, and utilizing a filter propagation protocol to exchange information directly between the first and second network devices to refine the filter.

The system of Vaid et al. includes a meta-policy service which distributes policies to the agents which are used to monitor and control network traffic. There is no direct exchange of filter statistics between nodes which allow the filters to be refined according to the filter statistics generated at the associated node.

Claim 19 is therefore submitted as not anticipated by Vaid et al. Claims 20 and 29, depending directly from claim 19, are submitted as patentable for the same reasons as claim 19.

Claim 21 is directed to a method for updating filters on a device and generally comprises: receiving data at an upstream device; filtering at least a portion of the data before sending the data to a downstream device; sending statistics based on the data received at the upstream device to the downstream device; receiving filter information from the downstream device; and updating a filter installed on the upstream device based on the received filter information. Claim 21 has been amended to clarify that the filter installed on the upstream network device is updated based on the filter information received at the downstream network device.

Claim 25 is directed to a method for propagating filters to an upstream device and generally comprises sending filter information to the upstream device; receiving flow information based on network flow received at the upstream device; analyzing the flow information; and sending updated filter information to the upstream device.

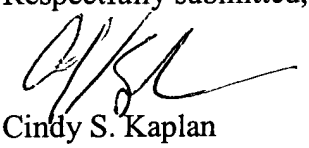
As previously discussed, Vaid et al. do not disclose the exchange of filter information or statistics between nodes so that filters can be refined according to the filter statistics generated at the associated downstream/upstream node. Accordingly, claims 21 and 25 are submitted as patentable over Vaid et al.

Claims 22-24 and 25, depending either directly or indirectly from claims 21 and 24, respectively, are submitted as patentable for the same reasons as claim 21 and 24.

V. Conclusion:

For the foregoing reasons, Applicant believes that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite prosecution of the application, please do not hesitate to call the undersigned at (408) 446-8695.

Respectfully submitted,



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